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Attorney's Docket 7040-18

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Lob

Examiner:

Ser. No.:

Art Group:

Title: FIXING ELEMENT FOR BONE FRAGMENTS

Filed: 24 JPR 2001

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PRELIMINARY AMENDMENT

This Preliminary Amendment is filed with the above case, which is the national stage entry in the United States of PCT/EP99/05194, which is in turn based on German application 198 35 096.1, which was filed on 25 July 1998. The fees for the claims should be calculated based on the claims remaining after the entry of this Preliminary Amendment, which results in 23 total and 2 independent claims. Consistent with the modifications to 37 CFR §1.121, the applicant has provided a clean copy of the claims as they stand after amendment.

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Amendments to the Disclosure

The specification as filed has been altered from the literal translation document received to delete information above the title, to insert headings according to US practice, and to insert paragraph numbering in lieu of line numbering. These changes do not introduce new matter.

In addition, please make changes to the specification at the following paragraphs:

[0001] The invention concerns a fixing element for fixing a first bone fragment to a corresponding second bone fragment, as in an ankle joint fracture [as set forth in the classifying portion of claim 1].

[0007] United States Patent 5,713,904 B1 to Errico, et al. (February 3, 1998), [US patent No 5 713 904] discloses a fixing element of the general kind set forth, in which an integral tubular fixing body is provided at both ends with longitudinal slots so that, upon the insertion of a suitable spreading body into its internal cavity, it is spread open in a cup-shaped configuration at both ends while it remains undeformed in its central region. The fixing body in that case is provided with a male screwthread by which of which it can be screwed into the bore in the bone.

[0038] In addition, at the distal end of the first stage 2.1 the spreading body 2 is of a transverse dimension which in the non-spread condition - as indicated in Figure 3 by the contour 16 shown in dash-dotted line - approximately corresponds to the transverse dimension of the operative surface 15.1 defining the cavity 3, at the proximal end of the first portion 1.1. Furthermore, the longitudinal spacing between the distal end of the first stage 2.1 and the distal end of the second stage 2.2 is less than the longitudinal spacing between the distal end of the second portion 1.2 and the proximal end of the first portion 1.1. That provides that the first part 17 [16] of the first portion 1.1, which is at the proximal end, is spread open before spreading of the second portion 1.2. In other words, the fixing body 1 is already anchored at its proximal end in the first bone fragment 5.1 before anchoring in the second bone fragment 5.2 occurs.

[0039] Due to the irregular spreading effect, the fixing body 1 is reduced in length in its longitudinal direction, as indicated in Figure 3 by the contour 18 shown in dash-double-dotted line. The reduction in length of the second portion 1.2 as a result of its spreading which begins at the distal end is transmitted to the first bone fragment 5.1 by way of the first part 17 [16] of the first portion, which is already spread open, so that the first bone fragment is pressed against the second bone fragment 5.2 in a manner which is advantageous in terms of healing.

Amendments to the Figures

None at this time.

Amendments to the Claims

After the heading "CLAIMS" and before the beginning of the claims, please insert the words: -- What is claimed is: --

Please amend the claims as follows:

1. (amended) An [A fixing] element for fixing a first bone fragment [(5.1)], in particular a bone fragment in an ankle joint fracture [fractures], to an associated second bone fragment [(5.2)], said fixing element comprising: [which includes] an elongate spreading body [(2; 2'; 2'')] and an elongate fixing body [(1; 1'; 1'')] which can be introduced into aligned bores [(4, 6; 4', 6'; 4'', 6'')] in the bone fragments [(5.1, 5.2)] and which has a proximal first portion [(1.1; 1.1'; 1.1'')] which is to be introduced into the first bone fragment [(5.1)], a distal second portion [(1.2; 1.2';